# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

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In the Matter of:	)
	)
Amendment of Part 74 regarding	) MB Docket No. 18-119
FM Translator Interference	)

To: Marlene Dortch, Secretary Federal Communications Commission

Attention: Media Bureau

#### **COMMENTS OF JEFF SIBERT**

#### I. Introduction

The following comments are submitted by myself, Jeff Sibert, regarding the Notice of Proposed Rulemaking in MB Docket 18-119. I am the president of Park Public Radio, which holds the license for Low Power FM (LPFM) station KPPS-LP. I also provide engineering services to a number of LPFM and Non-Commercial Educational (NCE) licenses.

I oppose changes to the FM translator rules where it will cause further harm to the LPFM operators and lower powered class A licenses<sup>1</sup>. There is substantial concern within the LPFM community about translator interference, which has become especially problematic following the numerous FM translator windows for AM operators. The Commission needs to tread very carefully to ensure that adequate safeguards remain with any rule change.

#### II. The Problem facing LPFM operators that this rulemaking will further exacerbate

The LPFM service was created to provide non-profit organizations an opportunity to obtain FM broadcast licenses to serve small areas. Following the 2013 LPFM filing window, hundreds of LPFM stations were constructed and are presently on the air providing unique programming to their service

<sup>1</sup> REC proposes 0.3 kW at 100 meters or the equivalent as being a lower powered class A license

areas. Unfortunately, many operators are now suffering from large scale interference due to the sign-on of FM translators following the AM revitalization windows. Several problems have been observed which contribute to the problems LPFM operators are facing:

- FM translators are licensed in very different ways than LPFM stations. FM translators, which are licensed by contour protection, can locate much closer to LPFM stations which are licensed only through strict mileage spacing.
- LPFM stations that become short-spaced by FM translators have few ways to move away from that interference. They cannot propose directional antennas and cannot propose contour protection to mitigate interference.
- LPFM stations are limited to much lower height and power than FM translators. A fill-in FM translator has no limit on height. Due to the shorter allowed construction time<sup>2</sup> and the lack of resources that most LPFM operators face, many LPFM stations were constructed with technical parameters that were not ideal. These stations were hoping to get on the air and then subsequently improve their facilities when a core audience of supporters could finance a taller height. This was in fact the suggestion Prometheus Radio gave its clients. Sadly, with fewer options available, many operators are stuck with these non-ideal sites.
- FM translators utilizing directional antennas are not subject to the 15 dB maximum to minimum ratio, 2dB per 10 degree limitation, and the requirement to submit a proof of performance, engineering certification, and survey report. The antenna described on paper may behave substantially different than the asbuilt antenna will perform.
- When an FM translator "encroaches" upon the an LPFM station, the process to seek remedy from the Commission is tedious, expensive, and wastes time. Most LPFM and small NCE operators have little financial resources and are primarily volunteer-driven.

These are the primary concerns which base my comments in this proceeding. It is my hope that the Commission will take the plight of LPFM and small NCE operators into consideration when it creates the final rules in this proceeding.

### III. Channel Changes to non-adjacent channels

The Commission proposes to allow FM translators to move to any available channel if interference is being caused or received between the FM translator and another station. The proposal,

<sup>2</sup> LPFM stations have an 18 month construction period vs 36 months for all other services. Although the FCC extended permits when LPFM operators asked for them, not all operators were aware of the existence of this process or had the knowledge on how to file for it.

however, does not explicitly specify this is only restricted to situations that would involve the displacement of the FM translator or situations involving the filing of formal interference complaints. As such there are numerous problems with this proposal which warrant reconsideration.

The first problem is almost every FM translator could say it is causing or receiving interference. Nearly every translator today operates on a frequency which is second or third adjacent to a full power FM station. In this case the translator operator could state that it is causing interference within its 100 dBu contour to a full power station on its second or third adjacent. This would give the FM translator operator permission to file applications to move to any frequency.

The second problem is it allows FM translator operators greater chance to utilize frequencies that may be usable by LPFM operators, which may include spectrum that was formerly occupied by an LPFM station that failed. Allowing translators the ability to move to any channel will eliminate any remaining LPFM opportunities in violation of the Local Community Radio Act, which requires the Commission to make licensing opportunities available to both FM translator and LPFM operators. The scraps of remaining spectrum will be quickly filled by other translator stations, including those who are making speculative filings to crowd out other potential operators. It would be very easy for a translator operator to file right before an LPFM filing window in order to preclude the licensing of new LPFM stations.

As it stands the Commission allows FM Translators the ability to move to a non-adjacent frequency in the case of displacement, if no adjacent or intermediate frequency is available. This allows the FM translator an opportunity to continue to operate but would reduce the harm that LPFM operators would face as FM translators further squeeze into locations that LPFM stations could be permitted to operate.

The Commission should simply codify long-standing policy allowing only translators to move to another frequency if the translator is facing displacement. To do more than this will invite an onslaught of translator minor change applications as operators seek to reshuffle FM translator stations

absent any consideration of LPFM operators. It could be said that LPFM operators have an advantage by being allowed to move to any frequency, but LPFM operators also have much stricter technical rules and need that flexibility to survive when facing encroachment. As long as FM translators are not subject to similar spacing rules as LPFM stations then their cries of unequal treatment should not be taken seriously or given any merit.

If the Commission is going to reduce the requirements for minor changes, procedures must be put into place to protect LPFM operators, both present and future. For instance, the Commission could impose a requirement that FM translators not reduce spectrum opportunities for LPFM operators in spectrum-limited markets. This could be based on the spectrum-limited market grids that were used to determine the outcome of pending Auction 83 translators prior to the 2013 LPFM window.

Another option would be to allow LPFM and/or FM translator operators the ability to create contingent non-adjacent frequency moves if it would increase the number of LPFM channels available. For example, there is a translator locally in Minneapolis, W278BP, that is third-adjacent to two full power stations. If the translator moved one channel down (to channel 277) it would create space on channel 279 for another FM translator that could be moved from a non-adjacent frequency. That would likely create an additional channel for LPFM operators in Minneapolis. This could be combined with a proposal made in RM-11810 to create an allocation-like scheme to reserve certain frequencies for future LPFM applications. Translator operators who can create new LPFM reservations could receive favorable treatment over those applicants that do not create and reserve additional LPFM opportunities.

#### IV. Required number of listener complaints

The Commission proposes to change the process by which operators may complain about an FM translator that is causing, or predicted to cause, interference. This proposal, unfortunately, creates an additional burden for those stations who are most at risk of devastating interference from new translator sign-ons.

The first proposal is to change the minimum number of listeners from one to six. This is a very arbitrary number which only makes it harder for stations who are (or are predicted to) experience interference to be able to lodge a complaint. It can be a challenge for all but a few operators to be able to successfully mount a campaign to solicit listener complaints within the 30 days allowed following the filing of an FM translator application.

For LPFM and many smaller non-commercial educational broadcasters this is nearly impossible. The legal costs alone can easily exceed \$10,000, which is an amount greater than many LPFM operator's annual budgets, and there is no guarantee of success. As an excellent example, I donated my time to help LPFM station WFNU-LP ward off a very nasty proposal by FM translator W235BP. Although we were initially successful, they carefully crafted an amendment to remove the remaining listeners we had identified. By this time we had already expended many hours and did not have the time or money to continue to fight off this terrible FM translator proposal. Sadly the listeners are still within the interference area of W235BP and will lose WFNU-LP when W235BP signs on, but there was no further recourse that we could pursue a that time. Since an LPFM already has limited coverage area, trying to obtain six listeners who will provide personal information and sign a declaration would be a challenge even if the LPFM loses a substantial portion of its coverage area. It is believed that the FM translator is not really interested in the tiny coverage it applied for, since it already has a 50,000 watt class A AM facility, but is merely waiting for WFNU-LP to fail so it can take over the coverage area that was vacated. Given the numerous challenges facing LPFM operators and the number of failures already, such speculation may not be unexpected.

Any proposal that would make it more difficult for LPFM stations and other lower powered NCE stations to object to FM translator interference by increasing the number of required complaints should be rejected absent other alternatives.

## V. Field Strength limits for interference

The Commission proposes to set a 54 dBu contour for all complaints to be valid. If the complaints are outside of the 54 dBu contour they would not be considered. While I appreciate creating some certainty, many LPFM stations have regular listeners beyond their 54 dBu contour and a small change would help LPFM operators who are experiencing legitimate interference.

It is well known that contours may not accurately predict actual coverage. There are numerous stations that have regular listeners outside of the 54 dBu coverage, due to factors such as terrain or anomalies which are not reflected in the official contours based on FCC curves methodology. This is particularly the case when it comes to lower powered stations such as LPFM and class A stations. A Longley-Rice showing may actually indicate that there is excellent signal strength beyond the predicted 54 dBu FCC Curves contour. Since the 54 dBu is only 2.4 km greater than the 60 dBu, many listeners that may live within the 60 dBu contour also likely travel on a regular basis to locations outside of the 54 dBu contour and may be harmed with the increased interference.

## VI. The Commission should fix the main reason why interference complaints are higher with FM translators

One of the biggest reasons that interference between FM translators and other stations are so prevalent is that FM translators that utilize directional antennas are subject to far less restrictions than those of full power stations.

FM translators with directional antennas do not need to propose patterns that conform to a 15 dB minimum to maximum ratio, or 2 dB per 10 degree increment. Many operators specify antennas that are well beyond this amount. The antenna proposed by the previously mentioned W235BP uses an antenna with a -40 dB null towards WFNU-LP, 2 watts ERP, and 253 meter height above ground level. There is a good reason full power operators cannot specify such tight antenna patterns, so why are FM translators allowed to do so?

Furthermore, FM translators are not required to submit a full proof of performance, nor have the antenna installation overseen by a professional engineer and licensed surveyor. The antenna may therefore perform much differently than predicted and operators facing interference may have no recourse to ensure that the antenna is installed correctly and appropriately limits radiation towards other stations.

If the Commission simply placed the same restrictions on FM translators that it does on full power FM stations, a large number of the problems would disappear. Unviable FM translator proposals that merely create interference or are speculative in nature would never be applied for and constructed and a large number of the complaints would disappear.

#### VII. Proposal

The Commission can still achieve its goal of creating a predictable non-subjective interference complaint process while not making it too difficult for lower powered stations to participate. The Commission should look at allowing interference complaints if any one of the following are true.

- Interference by at least one listener to any FM translator station that has a directional antenna that exceeds a 15 dB minimum to maximum ratio, exceeds 2 dB per 10 degrees, has no proof of performance, or has not submitted a certification that it was overseen by a professional engineer and licensed surveyor. This would match the requirement for full power stations<sup>3</sup>. There would be no time limitation imposed until the FM translator submits a license modification (and a minor change application if necessary) with a complete set of information. FM translator stations would be encouraged to comply with this rule to avoid the increased uncertainty of interference complaints.
- Interference to six listeners within the 54 dBu contour as proposed by the FCC. The Commission could provide for a reasonable period of time, such as within one year of signon of the FM translator or 30 days following application of the FM translator.
- Interference to six listeners at any location that experiences a 54 dBu contour as predicted by a Longley-Rice coverage. This will require submission of maps produced by commercial utilities such as V-Soft that create accurate Longley-Rice predictions, or non-commercial utilities such as the free utility used by the Canadian CRC. See <a href="http://lrcov.crc.ca/">http://lrcov.crc.ca/</a>. It is expected this method would not be

Absent would be the requirement to maintain 85% fill between measured antenna pattern and the antenna pattern listed on the application. Not having this requirement would allow FM translators the ability to still utilize highly directional antennas to minimize actual interference to other stations, while still minimizing the use of highly directional antennas at distances extremely close to other stations.

- substantially utilized due to the cost and complexity, however it may be useful in a small number of cases.
- Interference to stations that have had recent listener donations. Many LPFM and NCE stations rely on listener donations.
- Interference by at least six listeners within the 48 dBu contour of an LPFM or class A stations operating at 0.3 kW at 100 meters or equivalent.

Taken together, these five options would provide very objective criteria for evaluating interference. The burden on the Commission, on listeners, and on the stations receiving interference would be reduced through more subjective measures. FM translators would have an incentive to license their directional antennas in a manner similar to full power stations in order to eliminate the likelihood of interference complaints.

#### **VIII. Conclusion**

The proposals to modify the FM translator minor change rules will do substantial harm to LPFM stations absent safeguards to protect future licensing options. This can be accomplished by either limiting non-adjacent channel changes to displacement situations, or reserving LPFM opportunities. Likewise, the proposal to make it harder for stations to object to FM translator interference will remove one of the few bargaining chips that LPFM stations have towards FM translator stations that are causing interference. Given the gross disparity between FM translator and LPFM spacing requirements, the Commission needs to provide additional methods for LPFM stations to object to truly horrible FM translator proposals.

Respectfully Submitted,

/s/

Jeff Sibert August 6, 2018